

IN THE CLAIMS:

1-17 (Cancelled)

Claim 18 has been amended as follows:

18. (Currently amended) A data coding method comprising the
5 steps of:
monitoring a data signal containing a plurality of symbols and
determining a plurality of most frequently occurring data
components in said data signal, selected from the group
consisting of most frequently occurring symbols and most
10 frequently occurring sequences of symbols containing at least
two symbols;
allocating respective codewords to said most frequently occurring data
components, thereby obtaining a codeword set; and
forming a compressed signal by substituting the respective codewords
15 for said most frequently occurring data components; and
said data signal including uncoded symbols that are not among said
plurality of most frequently occurring symbols, and reserving at
least one codeword in said set as an indicator for said uncoded
symbols.
20 19. (Previously presented) A method as claimed in claim 18
wherein the step of monitoring said data signal comprises monitoring said
data signal during a predetermined time period.
Claim 20 has been cancelled
20. (Cancelled).
25 Claim 21 has been amended as follows:
21. (Currently amended) A method as claimed in claim ~~20~~ 18
wherein said uncoded symbols include uncoded negative symbols, and
comprising supplementing said at least one codeword serving as said
indicator for uncoded symbols with at least one further codeword, for said
30 uncoded negative symbols, indicative of a negative value.

22. (Previously presented) A method as claimed in claim 18 wherein the step of allocating codewords comprises allocating codewords to respective data components that are incorporated in other data components having another codeword allocated thereto.

5 23. (Previously presented) A data compression method comprising the steps of:

converting a plurality of most frequently occurring data components in a data signal containing a plurality of symbols into respective codewords, said most frequently occurring data components being selected from the group consisting of most frequently occurring symbols and most frequently occurring sequences of symbols containing at least two symbols; and

10 designating remaining symbols in said data signal, not among said most frequently occurring data components, with at least one codeword indicative of no compression; and

15 substituting said codewords in place of said symbols.

24. (Previously presented) A method as claimed in claim 23 comprising setting a predetermined number and a predetermined length for said codewords.

20 25. (Previously presented) A method as claimed in claim 23 comprising preprocessing an input signal containing a plurality of symbols to generate said data signal by generating an additional symbol representing a difference between contiguous symbols in said input signal.

25 26. (Previously presented) A method as claimed in claim 23 comprising the additional steps of:

reading a symbol in said data signal;

determining if the symbol that has been read corresponds to a codeword; and

30 substituting said codeword for said symbol that has been read if said symbol that has been read corresponds to only one codeword.

27. (Previously presented) A method as claimed in claim 26 wherein said symbol that has been read is a first symbol, and comprising the additional steps, if said first symbol corresponds to more than one codeword, of:

5 reading a subsequent symbol following said first symbol;
determining if said first symbol and said subsequent symbol
correspond to a codeword; and
substituting a codeword in place of said first symbol and said
subsequent symbol if said first symbol and said subsequent
10 symbol correspond to only one codeword.

28. (Previously presented) A method as claimed in claim 27 comprising the additional step, if said symbol that has been read corresponds to no codeword, retaining said symbol that has been read in said data signal.

Claim 29 has been amended as follows:

15 29. (Currently amended) An arrangement for compressing and decompressing a data signal, comprising:

a memory for storing codewords respectively corresponding to data
components selected from the group consisting of symbols and
symbol sequences; and
20 a determination unit supplied with a data signal containing a plurality of
symbols for determining if a symbol in said data signal
corresponds to a codeword in said memory and, if a symbol
corresponds to only one codeword in said memory, transmitting
that codeword in place of said symbol and transmitting said
25 symbol if said symbol corresponds to no codeword in said
memory; and

designating remaining symbols in said data signal, not among said
most frequently-occurring data components, with at least one
codeword indicative of no compression.

30. (Previously presented) An arrangement as claimed in claim 29 wherein said memory includes a plurality of memory locations respectively designating codewords, and wherein each memory location contains an indication of a number of possible symbol sequences, and is mapped to a symbol of said data signal.

31. (Previously presented) An arrangement as claimed in claim 30 further comprising a difference symbol generator, connected preceding said determination unit, which generates a difference symbol between contiguous symbols in said data signal.

32. (Previously presented) An arrangement as claimed in claim 29 wherein said memory comprises a plurality of memory locations having respective addresses, and wherein said addresses are said codewords.

Claim 33 has been amended as follows:

33. (Currently amended) A computer-readable medium encoded with a computer program product for converting a data signal containing a plurality of symbols into a compressed signal, said computer program, when said medium is loaded in a computer, causing the computer to product comprising:

~~a computer-readable program code for establishing~~ establish a set of codewords by determining a plurality of most frequently occurring data components in a data signal, said most frequently occurring data components being selected from the group consisting of most frequently occurring symbols and most frequently occurring sequences of symbols containing at least two symbols; and

~~said program code allocating to allocate~~ one codeword to each of said most frequently occurring data components; and
to designate remaining symbols in said data signal, not among said most frequently occurring data components, with at least one codeword indicative of no compression.

Claim 34 has been amended as follows:

34. (Currently amended) A ~~computer—program—product~~
computer-readable medium as claimed in claim 33 wherein said program
code ~~compresses~~ causes said computer to compress said data signal by
5 converting said most frequently occurring data components into respective
codewords by reading a symbol in said data signal and determining if said
symbol corresponds to a codeword, and if so, emitting said codeword instead
of said symbol and, if not, emitting said symbol.

Add the following new claims:

10 35. (New) A data coding method comprising the steps of:
monitoring a data signal containing a plurality of symbols and
determining a plurality of most frequently occurring data
components in said data signal, said data components
consisting of most frequently occurring sequences of symbols
15 containing at least two symbols;
allocating respective codewords to said most frequently occurring data
components, thereby obtaining a codeword set; and
forming a compressed signal by substituting the respective codewords
for said most frequently occurring data components.

20 36. (New) A computer-readable medium encoded with a computer
program for converting a data signal containing a plurality of symbols into a
compressed signal, said computer program, when said medium is loaded in a
computer, causing the computer to:

25 establish a set of codewords by determining a plurality of most
frequently occurring data components in a data signal, said most
frequently occurring data components consisting of most
frequently occurring sequences of symbols containing at least
two symbols; and
to allocate one codeword to each of said most frequently occurring
30 data components.